CITIZEN ADVISORY COMMITTEE RETREAT
ISSUE F – GROWTH IN MERCURY EMISSIONS

How should growth in mercury emissions be addressed in the proposed rules?

ALTERNATIVES:

1. To address growth, establish technology-based emission limitations for existing sources as well as new sources.
2. Phase emission offset ratio over time, initially 1.5: 1.0, to a more reasonable ratio of 1.0: 1.0.
3. Instead of emission offsets establish a mercury control technology requirement for new sources and modifications of existing sources with substantial mercury emissions.
4. Eliminate the offset requirement and rely on the rule's emission caps, reduction requirements, and federal MACT standards already applicable to new utility sources.
5. Emission offsets for new sources take effect at rule promulgation.
6. Require mercury emission reductions equal to 150% of the annual mercury emission increase from any new source or modification of an existing source without a lower mercury emission threshold of 10 pounds.
7. Alter emission offset ratio to a more reasonable 1.0:1.0 ratio.
8. Maintain offset provisions in the proposed rules.
9. Require mercury control technology for new sources and modifications of existing sources with substantial mercury emissions only if a finding were made that there would be a benefit from the reductions that would be achieved.

COMMITTEE DISCUSSION:

Some committee members oppose new source emission offsets in the proposed rules. These committee members emphasize that the federal program for hazardous air pollutants has technology requirements for major new sources or major modifications (e.g. utility boilers and industrial and commercial boilers) that would result in mercury emission reductions. These committee members are also concerned that the proposed offset provision is a disincentive to replacing older plants and are also concerned that not enough emission credits would be created to meet the stringency of 1.5 to1.0 offset ratio.

Other committee members supported the proposed emission offset approach for new sources and suggested that it be applied upon rule promulgation instead of 4 years after the rule effective date as currently proposed. Two alternatives were proposed (Alternative 2. and Alternative 7.) to respond to the concern that emission credits availability might be limited.

PROVISIONS IN THE PROPOSED RULE:

NR 446.05 Mercury emission offsets. Four years after promulgation the proposed rules require new or modified sources that will emit 10 pounds of mercury or more annually to secure emission offsets as a prerequisite to receiving a construction permit. The offset ratio is 1.5 to 1.0.

ADDITIONAL BACKGROUND:

When the Natural Resources Board authorized hearings on the proposed rules they also requested that public comment be sought on alternatives to the offset provisions. The following alternatives were offered for comment during public hearings:

- **More Stringent.** Require mercury emission reductions equal to 150% of the annual mercury emission increase from any new source or modification of an existing source without a lower mercury emission threshold of 10 pounds.

- **Latest Available Control Technology.** Instead of emission offsets establish a mercury control technology requirement for new sources and modifications of existing sources with substantial mercury emissions.

- **Latest Available Control Technology with Determination of Environmental Benefits.** Require mercury control technology for new sources and modifications of existing sources with substantial mercury emissions only if a finding were made that there would be a benefit from the reductions that would be achieved.

The Technical Advisory Group is preparing an issue brief on emission credits.

SUMMARY OF PUBLIC COMMENT:

Wisconsin Public Service Corporation – The provision to require offsets for new or modified sources that increase annual mercury emissions of 10 pounds or more is arbitrary and inappropriate. The offset provision has even a greater potential to force utility industry away from constructing new electric generating stations that are powered by coal. The very real potential exists that there will simply not be enough offsets available to permit these new sources.

Forest County Potawatomi Community – In order to avoid the potential for new sources to set artificially high baseline levels while avoiding emission offset requirements, it is recommended that the rule require all new sources commencing construction or modification at any time after the effective date of the rule to obtain emission offsets.

Wisconsin Paper Council - The Department staff has consistently described the offset procedure as applying to any new source that emits in excess of ten pounds of mercury. However, the language in NR 446.05 could be interpreted to require offsets for any increase in mercury. For example, if a company were required to obtain a construction permit for reasons other than exceeding the 10-pound mercury threshold, sub. (2) could require offsets for any mercury emissions associated with the project. This language should be reviewed closely and amended as necessary.

Wisconsin Electric - The current mercury proposal includes an emission cap plus a 1.5 to 1 offset provision for increased emissions from new or modified utility and industrial sources. Wisconsin Electric believes that the two requirements together go far beyond a reasonable state-only program. Programs that include overall emission caps, such as the federal acid rain program under Title IV of the Clean Air Act, do not require offsets. The cap prevents new units from increasing emission burdens over time. In addition, subsequent phases at lower cap levels insure continued environmental improvement over time. Requiring both a cap and offsets is overkill and is not necessary to meet the objectives of a well-designed mercury reduction program. The cap and offset provisions have the potential to limit beneficial modifications of the existing coal units, and prohibit the future development of new coal-fired generation in the state. These provisions will put the state's energy system, as well as business and industry, at a significant competitive disadvantage compared to our neighboring states - without accomplishing clearly defined environmental benefits.

Offsets are simply not necessary for the justifiable scope and timing of a Wisconsin-only mercury program. Any new utility unit is *already* covered by a case-by-case federal MACT standard. This was an important outcome of USEPA's December 2000 regulatory determination for mercury standards applicable to utility boilers. Federal provisions in place right now require the Department to conduct a case-by-case determination of MACT for new or reconstructed coal-fired units. If the Department were to implement the rules as drafted, there would, indeed, be no opportunity for the case-by-case process established in the federal MACT standard.

Wisconsin Electric's existing units by themselves are incapable of producing sufficient offsets for any proposed new advanced coal units given the 90% control requirement applicable to both new and existing units. In order to generate offsets internally, all existing boilers would have to achieve reductions of over 90%, or be retired. It is highly unreasonable to anticipate that a not-yet-proven control technology would be able to achieve greater than 90% mercury removal in order to generate emission offsets. This leaves the future of the planned advanced coal units completely dependent on a brand new, untested offset market. The market availability of "extra" offsets (reductions) produced voluntarily by smaller industrial sources is too small and too uncertain to rely on to support the multi-billion dollar investment in new coal-fired generation.

It is unlikely for an offset market to develop because other portions of the air emissions regulations actually discourage and complicate mercury reduction projects. An industrial process efficiency change that results in reduced mercury emissions may trigger applicability of the federal New Source Review program. Under this program, to generate mercury offsets, a source may actually have to first accept operational limits or install BACT to reduce mercury emissions. Because the emission calculations under NSR would show a net emission increase due to the process change, according to the proposed state offset provisions, the industrial source would additionally be required to obtain emission offsets at a 1.5 to 1 ratio! This example demonstrates how the proposed rule's offset provisions creates significant disincentives and risks for industrial sources to pursue projects and activities to reduce mercury emissions.

Alliant Energy - The rule requires that any proposed new or modified source of mercury emissions provide for offsets at a ratio of 1.5 to 1.0. This offset ratio is too high and will not be viable or sustainable. Furthermore, the 10 lb. annual allowable mercury emissions threshold is inconsistent and too restrictive compared to that required under Prevention of Significant Deterioration requirements which is 200 lb.

Wisconsin Manufacturers and Commerce - WMC objects to both the emission cap and emission offset requirements proposed for major stationary sources. The emission cap, likely to effect coal-fired industrial boilers, will in effect be a cap on productive capacity and it is also likely that emission offsets will not be available for companies to expand or locate in the state. WMC also believes that the 10-pound threshold is arbitrary, provides little environmental benefit and should be applied on a unit basis not a facility-wide basis.

COMMITTEE MEMBER INTERESTS:

Joe Shefchek – Alliant Energy
Complete evaluation to estimate the potential amount future mercury offsets necessary versus the amount of credits that may be available (from pollution controls or mercury-product collection). Assess whether the 1.5:1 offset requirement is feasible and sustainable (i.e., will not result shortages driving up costs).

Add "set aside" provisions to rule (i.e., bank of credits maintained under WDNR or state control versus private entity control) to ensure sufficient credits are available to support new source growth.
Add provisions to rule that allow new sources to apply for a variance in the event there are insufficient emissions credits available, provided that emissions sources are constructed using best available control technologies to reduce mercury emissions.
Revise rule provisions concerning minimum 50 lb. threshold for certifying mercury-containing product reduction projects, thereby increasing availability of credit incentives.
Revise rule provisions concerning minimum 5 lb. threshold for certifying pollution reduction projects, thereby increasing availability of credit incentives.
Revise rule provisions allowing utilities to obtain more than 25% of reductions from mercury-containing products or pollution reduction projects, thereby increasing availability of credit incentives.
Consider the effect that other mercury regulations may have on the pool of available mercury credits (i.e., such as Federal MACT). Reconsider current draft rule provisions that do not allow for certification of credits for emissions reductions required due to other local, state or federal Hg regulations (i.e., mercury reductions are not creditable if required for non-NR446 rules).
Allow sources credit for mercury emissions reductions made before the rule's required baseline years.

Annabeth Reitter – Stora Enso
Eliminate the offset reduction requirement. Either new sources are subject to MACT or do a model impact assessment and control to no significant impact taking into account economic and technological feasibility issues.

Mark Yeager - ECCOLA
New sources should be held to the strictest/cleanest standards.

Marc Looze – WED
Recognizing that virtual elimination of mercury emissions is a future goal, mercury emissions should not be allowed to increase. Utilities should move away from pulverized coal; there are substantially cleaner fossil-based power plant configurations for supplying Wisconsin's energy needs such as coal gasification or natural gas.

Ed Wilusz – WPC
It is important that this issue (offsets for new or expanded sources) be related to concerns about the viability of a mercury trading program.

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